

FIG. 1

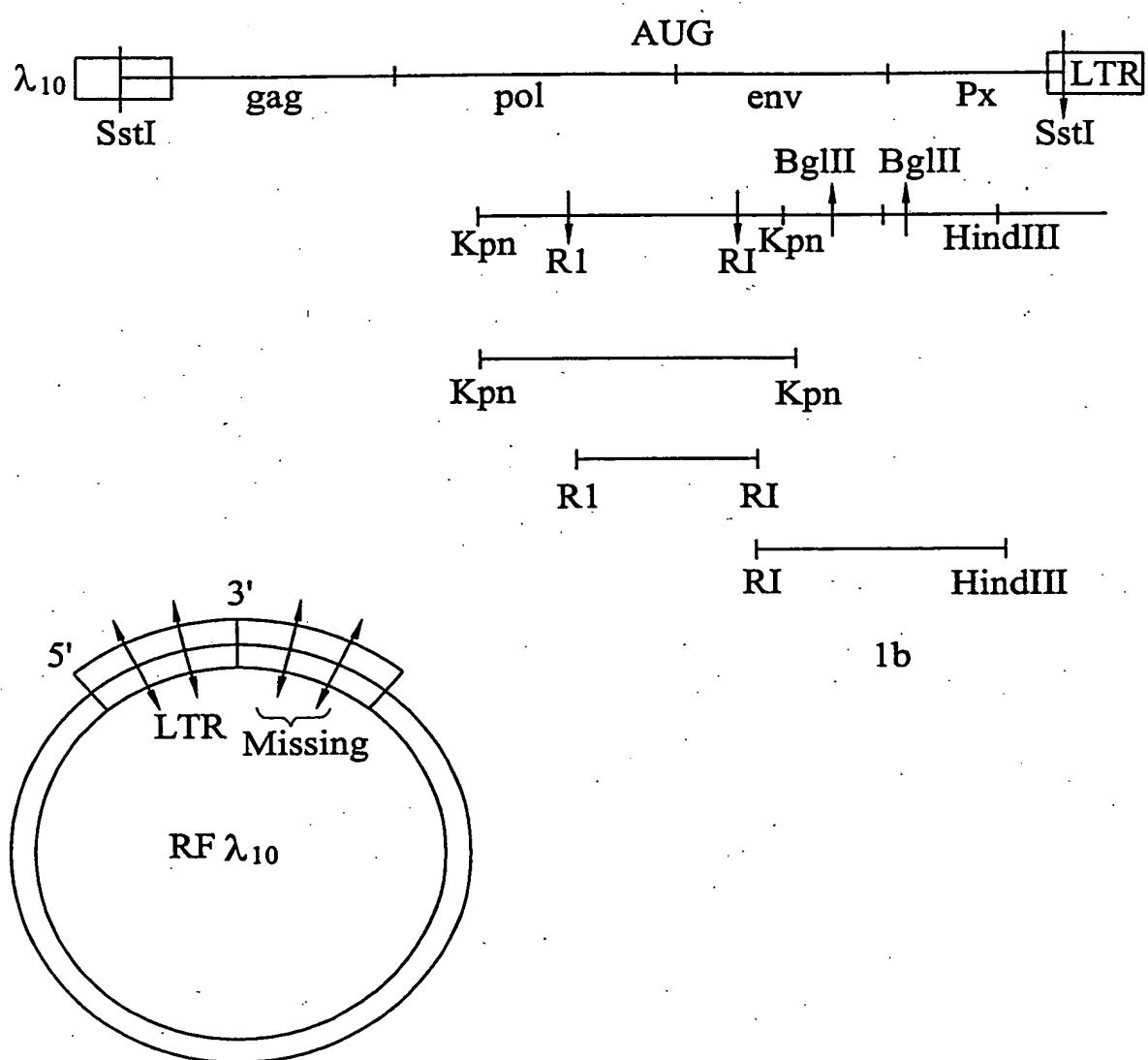
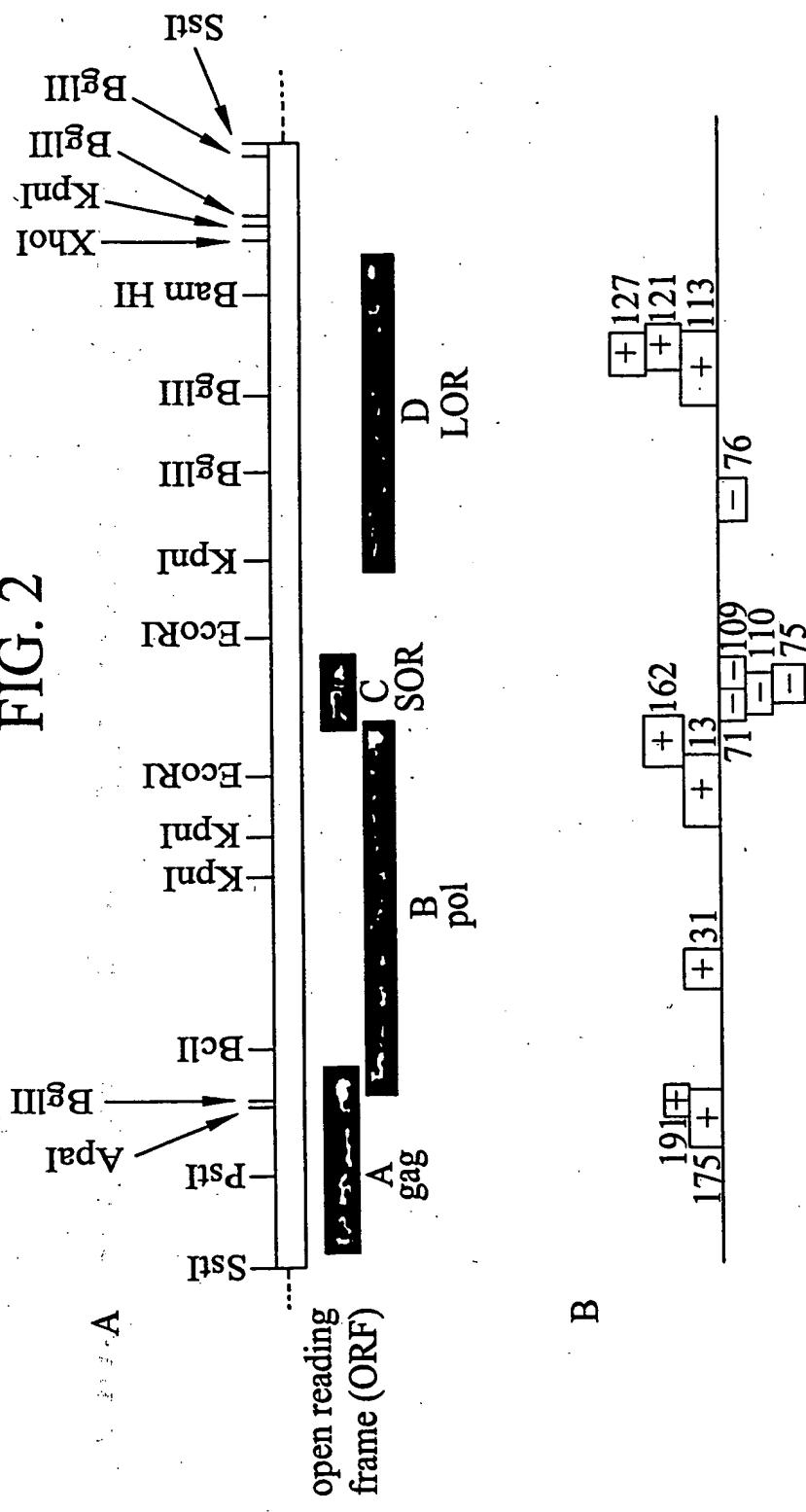


FIG. 2



CLONE

FIG. 3

CLONE	NUCLEOTIDE POSITION	AMINO ACID RESIDUE	
BH10 BH8	U3 IR		
BH10 BH8	(Bam HI) TATCCTTGATCTGTGGATCTACCAACACAAGGCTACTTCCCTGATTAGCGAACTACACACCAGGCCAGGGAT	-420 -345	
BH10 BH8	CAGATATCCCACTGACCTTGGATGGTGCTACAAGCTAGTACCACTGAGCCAGAGAAGTTAGAAGAACAA	-270	
BH10 BH8	AGGAGAGAACCCAGCTTGTACACCCCTGTGACCCCTGCATGGAATGGATGACCCGGAGAGAAGTGTAGAGTG	-195	
BH10 BH8	GAGGTTTGACAGGCCCTAGGATTTCATCACATGGCCGAGAGGCTGCAATCGGGAGTACTTCAGAACTGCTGACA	-120	
BH10 BH8	TCTGAGGCTTGCTACAAGGGGACTTTCCGGCTGGGGACTTTCCAGGGAGGGCTGGCCCTGGGGAGTGCGG	-65	
	TATA BOX Pvu II U3		
BH10 BH8	AGCCCTCAGATCCTGCATAAGCAGCTGCTTTGCCTGTACT	-1	
	R		
BH10 BH8	Bal I I Sst I GGGTCTCTCTGGTTAGACCCAGATCTGAGCCCTGGAGCTC	39	
	TCTGGCTAACTAGGGAAACCCACTGCTTAAGCCTCAA	73	
HXB2	Hind III R	US	
HXB2	TAAAGCTTGGCTTGAGTGTCTCAAGTAGTGTGCTGCTGCTGACTCTGGTAACTAGAGATCCCTCAGA	150	—tRNA-lysine — Leader sequence
HXB2	CCCTTTAGTCAGTGTGAAAATCTCTAGCAGTGGGCCAACAGGGACCTGAAAGCGAAAAGGGAAACCA	221	IR

FIG. 3 (Continued)

FIG. 3 (Continued)

In re Appln. of Chang et al.  
Continuation of U.S. Patent Appln. No.  
08/463,028  
Docket No. 223695  
Sheet 5 of 23

FIG. 3 (Continued)

In re Appln. of Chang et al.  
Continuation of U.S. Patent Appln. No.  
08/463,028  
Docket No. 223695  
Sheet 6 of 23

BH10	ACCAAAAGAACCTTTAGAGACTATGTAAGAGCCGAGCAAGCTTCAACAGGAGCT	1271	
BH5	ProLy5GluProPheArgAspTyrvAlaSpaPheArqAspTyrvAlaSpaPheArqAsp	313	
BH10	AAAAAATTGGATCACAGAACCTTGTTGGTCCAAAATGCCAACCCAGATGTAAAGACTATTITGAAAGCTTCAAGGCAAGAGCTT	1346	
BH5	LysAsnTrpMetThrLeuValGlnAlaAsnProAspCysLysThrIleLeuValAlaLeuGly	338	
BH10	ACCAAGGGCTACACTAGAAGAAATGATGACAGGCATGTCAAGGGTAGGAGGACCCGCCATAAGGCCATAAGGCAAGAGCTT	1421	
BH5	ProAlaAlaThrLeuGluGluMetMetThrAlaCysGlnGlyValGlyHi5ProGlyHi5lysAlaArgValLeu	363	
BH10	GGCTGAAGCCAATGAGCTTACACATAATCATGCCAGAGGGCAATTAGGAACCAAAAGAAA	1496	
BH5	AlaGluAlaMetSerGlnValThrAsnThrAlaThrIleMetMetGlnArgGlyAsnPheArgAsnGlnArgLys	388	
BH10	GATGGCTTAAGTGTTCATTGTCAGAACACAGCCAGAAATTGCAGGGCCCCTAGGAAAAAGGGCTG	1571	
BH5	MetValLysCysPheAsnCysGlyLysGluGlyHi5GluGlyHi5GluGlyHi5MetLysAsnPheArgAsnGlnArgLys	413	
BH10	—	1	Arg
BH5	SerThr	Arg	
BH10	—	2	POL
BH5	—	3	bq1 II
BH10	TGGAAATGGAAAGGACACCAAATGAAAGATGTACTGAGAGCAGGCTAAATTAGGGAGATCTG	1646	
BH5	TrpLysCysGlyLysGluGlyHi5GlnMetLysAspCysThrGluArgGlnAlaAsnPheLeuGlyLysIleIrp	438	
BH10	—	4	Direct Repeat
BH5	—	5	Direct Repeat
BH10	GCCTTCCTACAAGGGAAAGGCCAGGGATTTCAGGGAGACCAGAGCCAAACAGCCCCACCATTTCTTCAGAG	1721	
BH5	ProSerTyrLysGlyArgProGlyAsnPheLeuGlnSerArgProGlyAsnPheLeuProThrAlaProPheLeuGlnSer	465	
BH10	AlaPheLeuGlnGlyLysAlaArgGluPhoSerSerGluGlnThrArgAlaAsnSerProThrIleSerSerGlu	31	

FIG. 3 (Continued)

FIG. 3 (Continued)

In re Appln. of Chang et al.  
 Continuation of U.S. Patent Appln. No.  
 08/463,028  
 Docket No. 223695  
 Sheet 8 of 23

BH10	GGAATGGATGGCCAAAAGTTAACCAATGGCCATTGACAGAAGAAAAATAAGCCATTAGTAGAAATTGTACA GlyMetAspGlyProLysValleGlnTrpProLeuThrGluGluLysAlaLeuValGluIleCysThr	2246	206
BH5	-----		
BH10	GAAATGGAAAGGAAATTCTAAATGGCCCTGAGAATCCATAACATACTCCAAOTATTGCCATAAAG GluMetGluLysGluGlyLysIleSerLysIleGlyProGluAsnProTyroAsnThrProValPheAlaIleLys	2321	231
BH5	-----		
BH10	AAAAAGACAGTACTAAATGGAGAAATTAGTAGATTTCAGAGAACTTAAAGAGAACTCAAGACCTCTGGAA LysLysAspSerThrLysTrpArgLysLeuValAspPheArgGluLeuAsnLysAsnThrGlnAspPheTrpGlu	2396	256
BH5	-----		
	Arg		
BH10	GTTCAATTAGGAAATACCAACATCCCCCAGGGTTAAAAAAGAAAAATCACAACTAACAGTACTGGATGTTGGGTGATGCC ValGlnLeuGlyIleProHisProAlaGlyLeuLysLysLysSerValThrValleAspValGlyAspAla	2471	281
BH5	-----		
BH10	TATTTTCAGTTCCCTTAGATGAAGGACTTCAGGAAGGATAACTGCATTACCATACCTAGTATAAACAAATGAGACA TyrPheSrValProLeuAspGluAspPheArgLysTyrThrAlaPheThrIleProSerIleAsnAsnGluThr	2546	306
BH5	-----		
BH10	CCAGGGATTAGATAATCAGGTACAAATGGCTTCCACAGGGATGGAAAGGATCACCCAAATATTCCAAAGTAGGCATG ProGlyIleArgTyrGlnTyrAsnValleProGlnGlyIrpLysGlySerProAlaIlePheGlnSerMet	2621	331
BH5	-----		
	S rGly		
BH10	AACAAATCTTAGGGCTTTAAACAAATCCAGACATAGTTATCTATCAATACATGATGATTGTATGTA ThrLysIleLeuGluProPheLysLysGlnAsnProAspIleValleIlePheGlnTyrMetAspAspLeuIvrVal	2696	356
BH5	-----		
	Arg		

FIG. 3 (Continued)

In re Appln. of Chang et al.  
Continuation of U.S. Patent Appln. No.  
08/463,028  
Docket No. 223695  
Sheet 9 of 23

BH10	GCACTGACTTAGAACACATTCAGAAAGAACCTCCATTCTTGATGGTTATGAACTCCATCCTGATAAATGG GlySerAspLeuGluIleGlyGlnHisArgGlnHisLeuLeuArgIlePhe	2846	406
BH5			
BH10	Pvu II	2846	431
BH5	ACAGTACAGCCTATACTGCTGCCAGAACAGCAGCTGCAATGACATACAGAAGTTAGTGGGGAAATTG ThrValGlnProLeuIleGluIleAspSerTrpThrValAsnAspIleGlnLysLeuValGlyLysLeu	2921	456
BH5			
BH10	Ile	2996	481
BH5	AATTGGCCAAAGTCAGATTACCCAGGGATTAAAGTAAGCCAATTATGTAAACTCCTTAGAGGAACCAAAGGACTA AsnTrpAlaSerGlnIleIlePheGlyIleLysValArgGlyThrLysAlaLeu	3071	506
BH5			
BH10	ACAGAAAGTAATAACCAACTAACAGAACAGGAGCTAGAACTGGCAGAACAGAGAGATTCTAAAGAACCGATA ThrGluValIlePheIleThrGluIleGluIleAlaGluAsnArgGluIleLeuLysGluProVal	3146	531
BH5			
BH10	CATGGAGTGTATTATGACCCATCAAAGACTTAATGCAAGAACAGGAAATACAGAACGGGCCAAGGCCAATGGACATAT HisGlyValIleIlePheIleAlaGluIleGlnLysGlnGlyGlnGlyGlnTrpThrTyr	3221	556
BH5			
BH10	Aha III	3221	556
BH5	CAAAATTATCAAGAGCCATTAAAATCTGAAACAGGAAATATGCAAGAACAGGAAATGACGGGTGCCACACTAATGAT GlnIleIleIlePheIleAsnLeuLysThrGlyLysValIleAlaArgMetArgGlyAlaHisThrAsnAsp	3296	556
BH5			
BH10	GTAACACAAATTAAACAGAACAGGCAAAATAACCAACAGAACATAGYAAATAGGGAAAGACTCCTAAATT ValIleGlnIleIleThrGluIleValIleGlnLysIleValGlyLysThrProLysPhe	3296	556
BH5			

FIG. 3 (Continued)

FIG. 3 (Continued)

BH10	ATAGATAAAGCCCCAACATGAAACATTACAGTAATTGGAGACCAATGGCTAGTGTATTAACTGCCA IleAspLysAlaGlnAspGluAlaSerGluLysThrSerAsnTrpAlaMetAlaSerAspPheAsnLeuPro BHS	3896	756
BH10	Pvu II CCTCTACTAGCCAAATAGTAGCCAGCTGATAAAATOTCAGCTAAAGGAAAGCTAAATGGCACATGGCAAGTA Pr Val ValAlaSerCysGluLysValAlaSerCysAspLysCysGlnLeuLysGlyGluAlaMetAlaSerAsp BHS	3971	781
BH10	GACTCTAGTCAGGAATAATGGCAACTAGATTGTACACATTAGAAGGAAAGTTATCCTGCTAGCTCATGTA AspCysSerProGlyIleIrpGinLeuAspCysThrHisLeuGluGlyIleValIleLeuValAlaValAla BHS	4046	806
BH10	Aha III GCCAGTGGATAATAAGGAAACTAGATTCCAGCAGAAACAGGGCAGGAAACAGCCATATTTCCTTTAAATTAA AlaSerGlyIleGluValAlaGluValIlePProAlaGluThrAlaTyrPheLeuIleLeu BHS	4121	831
BH10	GCAGGAAGATAACAGACAATTACAGACAATAACAAATAACATAACAGACAATTGGCAGCAATTTCACCGCTACGGCTAAGGCCGCC AlaGlyIarGlyIleValAlaGluValIlePProAlaGluThrAspAlaGlySerAsnPheThrSerAlaThrValAlaAla BHS	4196	856
BH10	Eco RI TGTTCGGCCGAATCAAGGAAATTGGAAATTCCCTACAATCCCCTACAATCCCAAAAGTCAGGAGTAGTAGAAATCTATG CysTrpIrpAlaGlyIleIleSglGluPheGlyIleProTyraSmnProGlnSerGlyValValGluSerMet BHS	4271	881
BH10	AATAAGAAATTAAAGAAAATTAGGACAGGTTAAGAGATCAGGCTGAAACATCTTAAGACAGGAGTACAAATGGCA AsnLysGluLeuLysSleUleGlyGlnValGlyValAlaValGlyValAlaValGlyAlaMetAla BHS	4346	906

FIG. 3 (Continued)

FIG. 3 (Continued)

BH10	AGTCTCCATAGAATTGGAGGAAAAGAGATAATGCCACACAAGTAGACCCYGAACACTAGCAGACCAACTAATTCACT ValSerIleGluTrpAlaAspSerThrGlnValAspProGluLeuAlaAspGlnLeuIleHisLeu BHS	Arg	4946	120
BH10	GTTTACCTTGACTGTTCAGACTCTGCTATAAGAAAGGCCATTAGGACACATAGTTAGCCCTAGGTGTAA TyrTyrPheAspCysPheSerAspSerAlaIleArglySAlaLeuIleGlyIleSerProArgCysGlu BHS		5021	145
BH10	ATATCAAGCAGGACATAACAAAGGTAGGAATCTACATGGCACTAGCAGCATTATAACACCAAAAAAGAT TyrGlnAlaGlyIleSerClnTyrLeuAlaAlaLeuIleThrPralysLysIle BHS		5096	170
BH10	AAAGGCCACCTTGCCTAGTTACGAAACTGACAGGATAGATGCCAACAGACCAAGGCCACAO LysPpr ProLeuPpSerValThrLysLeuThrGluAspArgTrpAsnLysProGlnLysThrLysGlyHiSerQ BHS	SOR	5171	195
BH10	AGGGAGCCACACATGAAATTGGCACACTAGAGCTTTAGAGGAGCTTAAGAATGAAGCTGTTAGACATTTCCTAGG GlySerHiSerMetAsnGlyHiS		5246	203
BH10	ATTTGGCTCCATGGCTTAGGCCAACATATCTATGAAACTTATGGGATACTTGGCAGGAGTGAAGCCATAATA BHS		5321	
BH10	AGAATTCTGGCAACAACTGCTGTTTCAAGAATTGGCTTACATGGCAGGAGTGAAGCCATAATA BHS	Eco RI	5396	

FIG. 3 (Continued)

FIG. 3 (Continued)

In re Appln. of Chang et al.  
 Continuation of U.S. Patent Appln. No.  
 08/463,028  
 Docket No. 223695  
 Sheet 15 of 23

BH10	CATAATGGCCCCCACACATGCCGTGTGTACCCACAGACCCCCAACAAAGAAGTAGTATTGGTAAATGTGACA HisAsnValTrpAlaThrHisAlaCysValProTrpAspProAsnProGlnGluValValLeuValAsnValThr	6071	97
BH8			
BH10	GAAAATTTAACATGTGGAAAAATGACATGGTAGAACAGATGCATGAGGAATAATCAGTTTATGGGATCAAAAGC GluAsnPheAsnMetTrpLysAsnAspMetValGluGlnMethiLysGluAspIleSerLeuTrpAspGlnSer	6146	122
BH8			
BH10	CTAAAGCCATGTGTAATTAACCCCACACTCTGTGTAGTTAAAGTGCACTGATTGAAGAATGATAATACCC LeuLysProCysValIleThrProLeuCysValSerLeuThrProLeuCysValSerLeuLysCysValIleSerLeu	6221	147
BH8			
BH10	AATAGTAGTAGGGGAGATAATGGGAGAAAGGGAGAGATAAAACTGCTCTTCATTATCAGGCCACAAAGCATA AsnSerSerSerGlyArgMetIleMetGluIleLysGlyGluIleLysAsnCysSerPheAsnIleSerThrSerIle	6296	172
BH8			
BH10	AGAGGTAAGGGTGCAGAAAGAATAATGATAATAGATAATGATAATGACTACCAAGC ArgGlyLysValGinIleGluIleGlyIleGluIleGlyIleGluIleGlyIleGluIleGlyIleGluIleGlyIle	6371	197
BH8			
BH10	TATACGTTGACAAGTTGTAACACCTCAAGTCATTACACAGGCCGTCTGTCACAGGATATCCTTGTAGCCATTCCCAT TyrThrLeuThrSerCysAsnThrSerValIleThrGlnAlaCysProLysValSerPheGluProIleProIle	6446	222
BH8			
BH10	CATTATGTGCCCGGGCTGGCATCTAAATGTAATAAGACGTTCAATGGAACAGGGACCATGTCACA HisTyrCysAlaGlyPheAlaIleLeuLysCysAsnAsnLysThrPheAsnGlyThrGlyProCysThr	6521	247
BH8			
BH10	AATGTCAGCACAGTACATGGAAATTAGGCCAGTAGTAACTCAACTCAACTGCTGTTAAATGGCAGGCTG AsnValSerThrValGlnCysthrHisGlyIleArqProValValSerThrGlnLeuLeuAsnGlySerLeu	6596	272
BH8			

FIG. 3 (Continued)

BH10	CGAGAAGAGGTAGTAATTAGATCTGCCAAATGACAACAAATGGTAAATAGTACAGCTAACCAAA Ala Glu Glu Val Ile Arg Ser Ala Asn Phe Thr Asp Asn Pro Asn Met Arg Ser Val	6671	297
BH8	----- Val	----- Asp Thr	-----
BH10	TCTGTAGAAATTGTCACAAAGAACAAATACAAGAAAAGTATCCAGAGGACCAGGGAGA Ser Val Glu Ile Asn Cys Thr Arg Ser Ile Arg Ser Ile Asn Phe Thr Asp Asn BH8	6746	322
BH8	----- Lys X	----- G-GAA	-----
BH10	GCATTGGTTACAATTAGGAAATATGAGACACATTGTAAACATTAGTAGGCCAAATGGAAATAAC Ala Phe Val Ile Thr Ile Gly Lys Ile Gly Asn Met Arg Glu Ile His Cys Asn BH8	6821	347
BH8	----- Lys X	----- G-C- Ala	-----
Aha III	ACTTTAACACAGATAGCAAATTAGAGAACAAATTGGAAATAATAAAACAAATCTTTAAGCAGTCCTCA Thr Leu Ile Asp Ser Ile Asp	6896	372
BH10	GGAGGGACCCAGAAATTGTAACGCCACAGTTTAATTGGAGGGAAATTGTTCTACTGTAAATTCAACACA Gly Gly Asn Pro Glu Ile Val Thr His Ser Phe Asn Cys Asn Ser Thr Glu Ile Leu BH8	6971	397
BH8	----- X	----- -----	-----
BH10	TTTAATAGTACTTGCTTAATAGTACTTGGAGCTAAAGGCTCAAATAACACTGAAGGAAGTGACACAATCAC Ph Asn Ser Thr Trp Phe Asn Ser Thr Glu Ile Asn Thr Glu Gly Ser Asn Ser Asp Thr Ile Thr BH8	7066	422
BH8	----- X	----- -----	-----
BH10	CTCCCCATGCAGAATAAACAAATTATAACATGGCAGGAAGTAGGAAATGTATGCCCTCCCATCAGT Leu Pro Cys Arg Ile Lys Glu Ile Asn Met Ile Asn Met Tyr Ala Pro Pro Leu Ser BH8	7121	447

FIG. 3 (Continued)

In re Appln. of Chang et al.  
Continuation of U.S. Patent Appln. No.  
08/463,028  
Docket No. 223695  
Sheet 17 of 23

FIG. 3 (Continued)

		Hind III	
BH10	AATAAACTCTGGAAATAACATGACCCTGGATGGAGTGGGACAGAGAAATTAAACAATTACACAAAGC AsnLysSerLeuGluGlnIleTrpAsnMetThrTrpMetGluTrpAspArgLysAsnTyrThrSer	7721 647	
BH8			
BH10	TTAATACACTCCCTTAATTGAAGAACCGCAAGAAAAGAACAGAAATTGGAATTAGATAAA LeuIleHisSerLeuGluGluSerGlnAsnGlnGlnGlnGlnGluGlnGluLeuAspLys	7796 672	
BH8			
BH10	TGGGCAAGTTGTGGAATTGGCTGTGGTATAAAATTTCATAATGATAGTAGTAGGA TrpAlaSerLeuTrpAsnTrpPheAsnIleThrAsnTrpLeuIleTrpTyrLeuPhelLeMetIleValGly	7871 691	
BH8			
BH10	GGCTTGGTTAGGTTAAGAAATAGTTTTGCCTGTACTTTCTGTAGTGAATAGAGTAGGTAGGCAGGGATATTTCACCATTA GlyLeuValGlyLeuArgIleValPheAlaValLeuSerValAlaSerValArqValGlyTyrSerProLeu	7946 722	
BH8			
BH10	TCGTTCAACCCACCTCCCAATCCCCGAGGGACACGGCCCCGAAAGGAATAGAAGAAGGAAGGTGGAGAGAGA SerPheGlnThrHisLeuProIleProArqGlyProAsparqProGlyIleGluGluGlyGlyGluArg	8021 747	
BH8			
BH10	GACAGAGACAGATCCATTAGTGAACGGATCCTTAGCACTTATCTGGGACCGATCTGGGGACGCCCTGTGCCCTC AsparqAsparqSerIleArgLeuValAsnGlySerLeuAlaLeuIleTrpAspAspLeuArgSerLeuCysLeu	8096 772	
BH8			
BH10	TTCAAGCTACCAACCGCTTGAGAGACTTACTCTTGATITGTAACGGAGGATTGTGGAAACTCTGGGACGCCAGGGGTGG PheSerTyrHisArgLeuAspLeuArqAspLeuValThrArgIleValGlyArgAspGlyIleVal	8171 797	
BH8			

FIG. 3 (Continued)

BH10	GAAGCCCTCAAAATGGGAAATCTCCTACAGTATTGGAGTCAGGAGCTAAAGAATAGTGCTGCTC GluAlaLeuLysTyrTrpTrpAsnLeuGlnTyrTrpSerGlnGluEulySAsnSerAlaValSerLeuLeu BH8	(Mpa I) 8246	822
BH10	AATGCCACAGCTATAGGAGTAGCTAGGTATAGAACAGATAGGGTTATAGAGCTTATAGAGCTATT AsnAlaThrAlaAlaValAlaGluGlyThrAspArgValleGluValValGlnGlyAlaTyrArgAlaIle BH8	8321	847
BH10	CCCCACATACCTAGAAGAAATAAGACAGGGCTGGAAAGGATTTCAGCTATAAGATGGCTGGCAAGTGCTCAAAAG ArgHisIleProArgArgIleArgGlnGlyLeuGluArgIleLeuLeu BH8	8396	863
BH10	TAGTGTGGTTGGATGGCTGGCTAGGAAAGAATGAGACGGCTGAGCCAGGCCAGATGGGGTGGGAGCAGC BH8	8471	
BH10	Xh I ATCTCGAGACCTAGAAAACATGGACCAATCACAGTAGCAACACAGGAGCTAACAAATGCTGATTGCCCCTGGCT BH8	8546	
BH10	AGAAGCACAAGAGGAGGAGGAGGTGGTTTCCAGTCACACCTCAGGTACCTTTAAGACCAAATGACTTACAAGGC BH8	8621	
PvuII Bgl II	Aha III Polypurine Tract IR ACCTGTAGATCTTAGCCACTTTAAAGAAAAAGGGGGACTGGAAAGGGCTAATTCACTCCCCAACGAAAGACAAGA BH8	8696	
BH10	(Bam HI) TATCCTTGATCTGTGGATCTACACACACAAGGCTACTTCCTGATTAGCAGAACTACACACCAGGGCCAGGGAT BH8	8771	

FIG. 3 (Continued)

BH10 CAGATATCCACTGACCTTGGATGGTACAAGCTTACCACTGTGAGCCTGATGGATGGAAAGTAGAAGAACAA 8846  
BH8 -----  
----- A ----- T -----  
  
BH10 AGGAGAGAACCCAGCTTGTTACACCCCTGTGAGCCTGATGGATGGAAAGAGAGAAGTAGAGTC 8921  
BH8 -----  
----- T -----  
  
BH10 GAGGTTGACAGCCGCCATTGCACTCACATGGCCCGAGAGCTGCATCCGGAGTACTTCAGAACTGCTGACA 8996  
BH8 -----  
----- T -----  
  
BH10 TCGAGCTTGGTACAAGGGACCTTCCGGCTGGGACTTCCAGGGAGGGCTGGCCCTGGGGACTGGGAGTGGCG 9071  
BH8 -----  
-----  
  
Pvu II U3 ----- R Bgl II  
AGCCCTCAGATCCTGCCATATAAGCAGCTGCTTTCGCTGTACTGGGTCTCTCGITAGACCAGATCTGAGCCT 9146  
BH8 -----  
  
Sst I R  
BH10 GGGAGCTC 9154  
BH8 -----  
  
Hind III R  
Poly(A) S1q R  
TCTGGCTAGGAAACCCACTGCTTAAGCTAAGCTCAATAAGCTTGCCTTGAGTGCTTC 9213  
U5  
AGTAGTGTGCCCCGTCTGTTGCTGACTCTGGTAACTAGAGATCCCCTCAGA  
U5 IR  
  
HXB2 CCCTTTAGTCAGTGTGGAAAATCTCTAGCA

FIG. 4

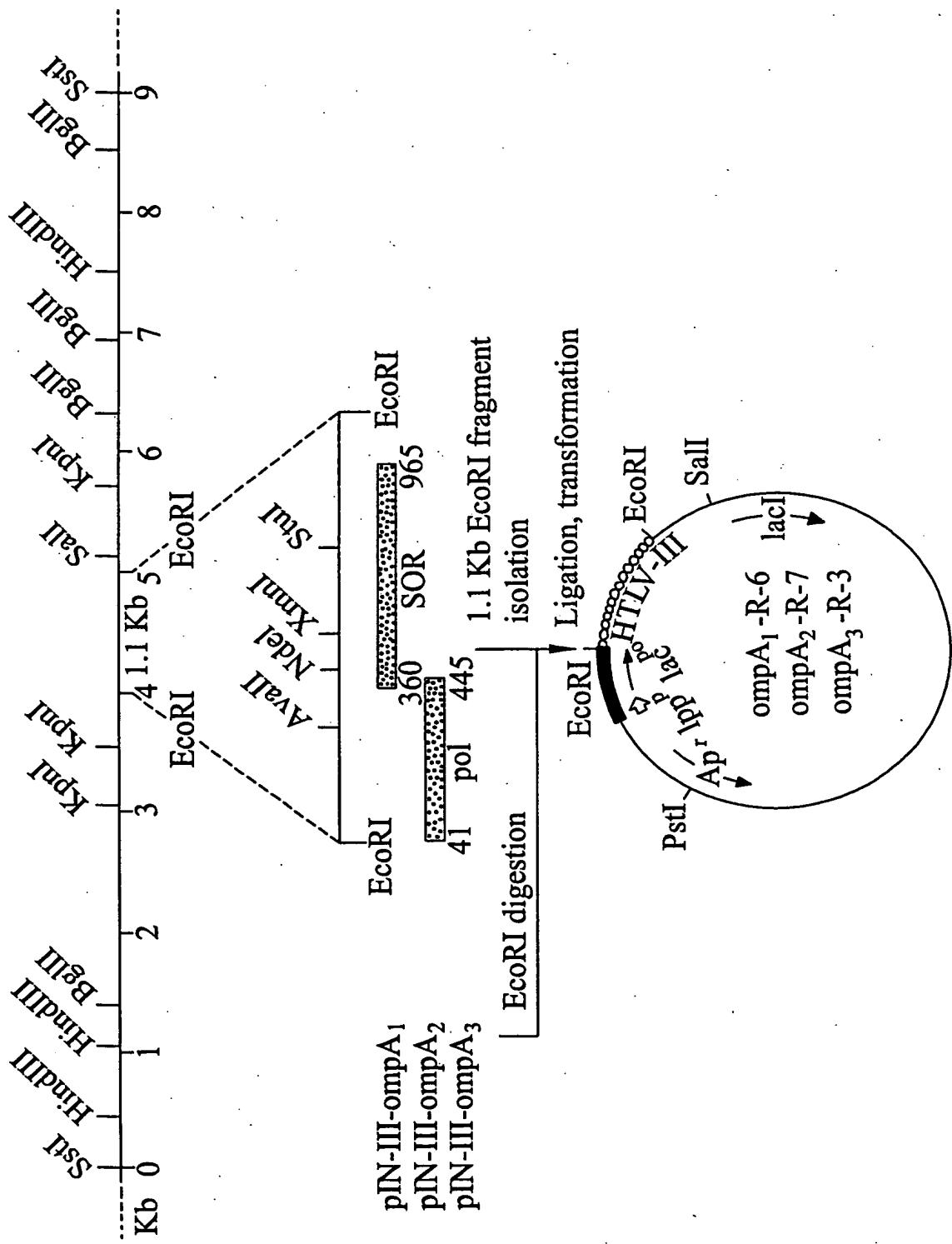


FIG. 5

ompA signal peptide

mtLV-III

EcoRI

ompA3-R-3: ----- GGGCAGGCC

AlaGlnAla

▼  
GGATTCCCTACAATCCCAAGTCAGGAGTAGTAGAATCTATGAATAAAGATTA -----  
GlyIleProTyrAsnProGlnSerGlnGlyValValGluSerMetAsnLysGluLeu -----

EcoRI

OmpA2-R-7: ----- GGGCAGGCC

AlaGlnAla

▼  
GCTGAATTCCCTACAATCCCAAAGTCAAAGGAGTAGTAGAATCTATGAATAAAGATTA -----  
AlaGluPhe

EcoRI

OmpA1-R-6: ----- GGGCAGGCC

AlaGlnAla

▼  
GGGAATTCCCTACAATCCCAAAGTCAAAGGAGTAGTAGAATCTATGAATAAAGATTA -----  
AlaAsnSer

FIG. 6

